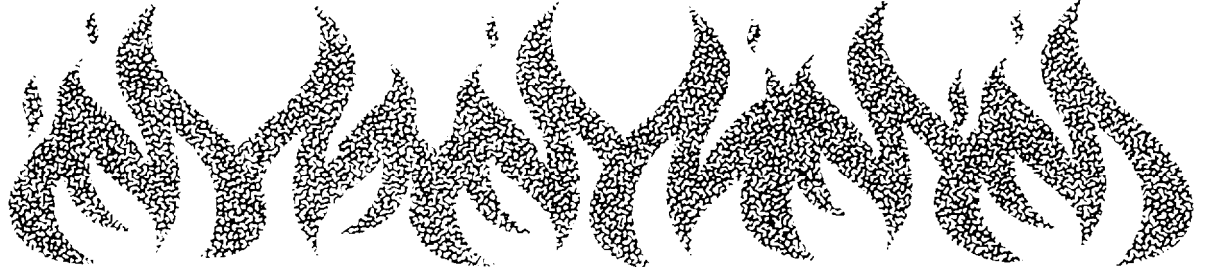


United States Fire Administration



Technical Report Series

Five-Fatality High-rise Office Building Fire Atlanta, Georgia



Federal Emergency Management Agency



**United States Fire Administration
National Fire Data Center**

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Five-Fatality High-rise Office Building Fire Atlanta, Georgia (June 30, 1989)

Investigated by: Charles Jennings

This is Report 033 of the Major Fires Investigation Project conducted by TriData Corporation under contract EMW-88-C-2649 to the United States Fire Administration, Federal Emergency Management Agency.



Federal Emergency Management Agency



**United States Fire Administration
National Fire Data Center**

U.S. Fire Administration Fire Investigations Program

The U.S. Fire Administration develops reports on selected major fires throughout the country. The fires usually involve multiple deaths or a large loss of property. But the primary criterion for deciding to do a report is whether it will result in significant "lessons learned." In some cases these lessons bring to light new knowledge about fire -- the effect of building construction or contents, human behavior in fire, etc. In other cases, the lessons are not new but are serious enough to highlight once again, with yet another fire tragedy report.

The reports are sent to fire magazines and are distributed at national and regional fire meetings. The International Association of Fire Chiefs assists USFA in disseminating the findings throughout the fire service. On a continuing basis the reports are available on request from USFA.

This body of work provides detailed information on the nature of the fire problem for policymakers who must decide on allocations of resources between fire and other pressing problems, and within the fire service to improve codes and code enforcement, training, public fire education, building technology, and other related areas.

The Fire Administration, which has no regulatory authority, sends an experienced fire investigator into a community after a major incident only after having conferred with the local fire authorities to insure that USFA's assistance and presence would be supportive and in no way interfere with any review of the incident they are themselves conducting. The intent is not to arrive during the event or even immediately after, but rather after the dust settles, so that a complete and objective review of all the important aspects of the incident can be made. Local authorities review USFA's report while it is in draft. The USFA investigator or team is available to local authorities should they wish to request technical assistance for their own investigation.

This report and its recommendations were developed by USFA staff and by TriData Corporation, Arlington, Virginia, its staff and consultants, who are under contract to assist the Fire Administration in carrying out the Fire Reports Program.

The U.S. Fire Administration appreciates the cooperation and assistance received from Chief Tom Perrin, Deputy Chief D.M. Chamberlin, Assistant Chief D.E. Sparks, and many other members of the Atlanta Bureau of Fire Services. USFA also thanks O.H. Brantley of the Atlanta City Attorney's Office and Norman Koplon of the Bureau of Buildings. Thomas Davis, Henry Singer, and personnel of the U.S. General Services Administration, Robert Erikson of the U.S. Forest Service, and Nick Arroyo of the Atlanta Constitution also contributed to the report.

**Five-Fatality High-rise Office Building Fire
Atlanta, Georgia**

Investigated by: Charles Jennings

Local Contacts: D. M. Chamberlin, Sr., Deputy Chief
D. E. Sparks, Assistant Chief
Bureau of Fire Services
46 Courtland Street, S.E.
Atlanta, Georgia 30335

OVERVIEW

At 1029, June 30, 1989 in Atlanta, Georgia an electrical fire originating on the sixth floor of a 10-story office building killed five people, and injured 23 civilians and six firefighters. One woman had jumped from a sixth floor window prior to the Fire Department's arrival and was seriously injured. Firefighters removed approximately 14 people over aerial ladders and rescued five others from the interior of the building.

The electric closet where the fire started opened directly onto the exit corridor. When the fire erupted, it immediately blocked the corridor, keeping most victims away from the two exits serving the floor.

This fire was reported to be the first multiple death U.S. high-rise office building fire in over 10 years. The fire demonstrates the need for automatic sprinkler protection for high-rise buildings and illustrates the impact that occupant behavior can have on survival in fire situations.

All of the trapped survivors broke windows to offices and waited for rescue. Four of the people who died were overcome by smoke and toxic gases in the corridor or in offices where windows weren't broken. The fifth fatality was an electrician who was seriously injured by the initial electrical arc, then died from the effects of the fire.

The 10-story fire resistive office building was constructed in 1968 and was not required to be equipped with automatic sprinklers. The building evacuation plan, *which* had been practiced regularly, was credited

SUMMARY OF KEY ISSUES

I s s u e s	Comments
The Fire	Confined to sixth floor of 10-story fire resistive office building.
Casualties	Five fatalities; 29 injured, including six firefighters and one occupant who jumped prior to Fire Department arrival.
Fire Protection Features	No sprinklers or detection systems present on floor of origin. Fire reported on manual fire alarm system via Master Box to Atlanta Municipal Fire Alarm System. Standpipes with occupant use hoselines were provided at each stairwell. Selected floors had had smoke detectors installed during renovations.
Fire Cause/Origin	Electrical arcing started fire in electrical closet that opened onto exit corridor.
Incident Command	Incident Command System was effective; normal radio frequencies were supplemented with cellular phones, additional frequencies.
Occupant Behavior	People trapped broke windows to survive and were rescued by firefighters -- mainly over aerial ladders.
Fire Drills	Experience from fire drills enabled most occupants to escape quickly.
Arrangement of Exits	The electric closet was located such that when the fire started, access to both exits was blocked for several offices that were located at the end of a dead-end corridor.

with the successful evacuation of occupants on floors other than the fire floor. The building was occupied by a large number of federal workers who were required to practice evacuations, and also several private firms who were not obligated to and only occasionally participated in these evacuation drills.

THE BUILDING

The building at 1720 Peachtree Street was known as the "Peachtree 25th" building. The 10-story 200 x 200 foot building was comprised of two separate tower structures. Each tower was 19,000 square feet per floor. The tower structures were built atop a 3-level parking garage with spaces for 840 vehicles. The parking garage was topped by a parking deck that surrounded three sides of the building. The site sloped downward from Peachtree Street so that the 3-story parking structure was at grade level to the rear (see Appendix A). The buildings, known as the North and South Towers, were each served by two exit stairways, one at the front and one at the rear of the rectangular shaped building (see Appendix B) and four passenger elevators. Construction of the Peachtree 25th building was typical of that used in high-rises built in the 1960's.

The two towers were arranged in symmetrical fashion. The North Tower, built in 1962, was of fire resistive construction and had an exterior masonry finish with fire canopies ("eyebrows") running the length of every floor.

The South Tower, where the fire occurred, was completed in 1969. It was of fire resistive concrete construction and had panel walls of black glass held together with aluminum mullions. Windows ran from approximately two feet above the floor to slightly below the ceiling line. The spaces above the ceiling and below the windows were covered with opaque black glass panels to create a uniform facade. The front of the structure was finished in black glass and gave the appearance of a single building (see photo 7 in Appendix H).

The arrangement of floors was such that in some cases, depending on tenant requirements, there was interconnection between the North and the

South Towers on the corridor serving the elevator lobbies (see Appendix B). On the sixth floor, where the fire started, there was no connection between the North and South Towers. In all cases, there was no separation of elevator lobbies from the corridor.

The principal vertical penetration floor to floor in the South Tower was an electrical bus duct which ran the height of the building and was inside electrical closets. Each electric closet opened onto the central hallway which served both exits. Other vertical penetrations were incidental.

Interior partitions ran from the floor to the underside of a suspended ceiling assembly. The suspended ceiling assembly created an undivided ceiling area that encompassed the entire floor.

An individual air handling unit was located on each floor, and there were no penetrations between floors for air handling purposes. The supply air was directed from the air handler to air transfer grilles in the suspended ceiling via flexible duct connectors. Return air was routed through the plenum that was created above the suspended ceiling. There was no smoke detection incorporated in the air handling system.

Interior finish on the fire floor was reported to include carpeting and vinyl wall covering. Information on their exact nature was not available.

Fire protection features of the building included manual fire alarm stations located at each exit, a Class III standpipe system with 6-inch standpipe risers located in each stairwell, and occupant use hose stations in the interior corridors at each stairway. Two floors had been equipped with smoke detection in the course of renovations, but there was none on the fire floor. Elevators in the South Tower had no automatic recall or firefighter service features, although one elevator in the older North Tower was so equipped. Emergency power was provided for the fire alarm and emergency lighting in stairways.

The building was constructed under the City of Atlanta Building Code, which is a modified version of the Southern Building Code. Minimum fire

resistance ratings for a building of this type were two hours for concrete floors, with three-hour ratings for columns. There were no significant fire code violations at the time of the fire.

THE FIRE

June 30, 1989 fell on the Friday that immediately preceded the July 4th weekend. The Peachtree 25th building had about 60 percent of its normal occupancy present. On the sixth floor of the South Tower there were approximately 40 people working in five separate offices. A localized power outage had occurred sometime prior to 1030, and several electricians were working to replace a fuse that had blown. Occupants of the sixth floor remained in their offices. Apparently there was limited power on the floor. Three electricians were working in the electric closet, apparently attempting to replace a fuse on a live conductor, when arcing occurred. When the first part of the fuse was inserted there apparently was some sparking and the other two workmen moved down the hall from the electric closet. When the electrician continued to insert the fuse there was an apparent uncontrolled and sustained arc. One witness described it as "a light so bright it lit up the hallway and blinded me. I couldn't see any more after that." (See Appendix C.)

Occupants of the building reported three explosions in rapid succession on the sixth floor. The two workers accompanying the electrician were driven back due to the intensity of the arc in the electric closet. This arc created extreme heat and smoke and began a self-sustaining fire in the electrical closet. When occupants of the sixth floor opened doors to the corridor, they were greeted by heavy smoke and heat. Conditions were so severe in the sixth floor corridor that the injured electrician, crying for assistance and apparently having suffered an electrical shock, could not be reached by his co-workers. Occupants from the sixth floor reported that the heat and smoke were so intense that they too could not reach the man.

On the seventh floor, the floor above the fire, workers reported a problem with the electricity immediately following the explosions. The VDT screens started flickering and behaving erratically. Workers from the

seventh floor wandering to the corridor to investigate discovered fire coming from around the doors of their electric closet. A member of the seventh floor staff activated the fire alarm and alerted other workers on that floor to evacuate immediately. By the time workers attempted to exit via the front stairway they reported that it was impassable due to heavy smoke. The approximate time elapsed between the explosion and their attempted egress was less than a minute. Workers from the seventh floor then proceeded to the rear stairway where they were able to evacuate the building. Workers from upper floors reported that the rear stairway was also filling with smoke and several workers reported difficulty making it out of the building. Nevertheless, all workers above the sixth floor were able to evacuate under their own power.

It appears that at least two occupants of the sixth floor were overcome while attempting to seek refuge or evacuate via the stairwell. Other workers on the sixth floor sought shelter in offices. Those who did this were primarily located on the end of the corridor closest to the electric closet. Their egress was undoubtedly blocked. One occupant of the sixth floor did seek refuge in an office on the opposite end of the floor, after rescuing a worker who was overcome in the hallway.

On arrival of the Fire Department the sixth floor occupants had assembled into four distinct areas of refuge. At the front of the building facing Peachtree Street approximately 12 to 14 workers had gathered in an office and broken a window to attract attention and ventilate some of the smoke that was filtering into their office.

A worker who was directly across the hall from the electrical closet (Suite 676) remained in his office and did not break a window. This worker was found dead after the fire.

Adjacent to this worker's office approximately seven people sought refuge in another office (Suite 680), where they broke out the window (see Photo 2, Appendix J). They suffered severe exposure to smoke and heat. Five of these occupants were rescued over Fire Department ladders. A sixth member of this group succumbed to smoke before reaching the office. She was later removed from the building and died three days after the fire.

The seventh occupant who sought refuge with the group jumped from the sixth floor shortly before the Fire Department's arrival and landed on a driveway serving the rear of the building (see Photo 9, Appendix J). She was seriously injured but survived.

The final group that took refuge was at the rear of the building in an area not accessible by aerial apparatus. This group consisted of one worker and a companion he had rescued from the corridor. The worker broke the window to his office and waited approximately 30 minutes before the Fire Department to remove him and his unconscious companion from the office via the south interior stairwell. The companion, who was not breathing and had no heart beat, did not respond to resuscitation attempts (see Photo 5, Appendix J).

FIRE DEPARTMENT RESPONSE

The Atlanta Bureau of Fire Services originally received the call at 1029 as an automatic alarm originating at 1720 Peachtree Street, Northwest, and dispatched a normal assignment of three engines and two trucks, an EMS unit, and a battalion chief. However, they soon received approximately 20 phone calls in succession reporting a serious fire on the sixth floor and dispatched an additional rescue unit and a manpower squad. The temperature was about 90 degrees and humidity was 90 percent.

On arrival the Atlanta Fire Bureau was faced with one victim who had already jumped to the ground, approximately 19 people in need of immediate rescue, heavy smoke and heat conditions on the sixth floor with fire extension to the seventh and possibly other floors, elevators that did not automatically return to the ground floor of the building, and people still evacuating as attack crews were attempting to enter the building.

The first two truck companies were assigned to make rescues over ladders of those occupants at windows in the front of the building. Rescue units were assigned the job of triage and treatment of those victims coming down who had suffered smoke inhalation and burns, and caring for the victim who had jumped. The second alarm was transmitted six minutes after the first, at 1035, followed by a third alarm at 1043.

Because recovery of the victim who had jumped blocked the driveway and the decision to rescue the five seriously threatened occupants on the side of the building, vehicle access to the rear of the building was impossible. A complicating factor was that the roof deck was rated at 50 pounds per square foot, which required a judgement call as to whether the operation of aerial devices on the structure was safe. Ultimately, an aerial was put into operation in the rear. Engine companies started up the front stairwell with hose packs and encountered heavy smoke at the fourth floor. These companies donned their breathing apparatus and continued to the sixth floor where they made an attack on the main body of fire centered about the electrical closet.

At the rear of the building the Fire Department observed two men at a broken window who were exposed to a fairly heavy smoke condition. Firefighters on the parking deck attempted to calm these men while other firefighters went upstairs to attempt the rescue. Heat conditions were so severe on the fire floor that the truck company assigned to the rescue pulled a "house line" to reduce the intense heat before completing the rescue. Additional hoselines were put into service on the fourth, the fifth, and ultimately the seventh floors.

Extreme heat on the sixth floor required frequent rotation of crews. The initial company on the fire floor extinguished the bulk of the fire but had to leave because their air was running out. The first victim of the fire was discovered at this time in the hallway. However, because of the extensive nature of his injuries, he was not removed. Of the five fire victims who did not survive, three were removed from the building and resuscitation efforts were attempted.

The search for victims and survivors was complicated by the confusing layout of the open plan offices and the fact that almost all doors were locked, which required extensive forcible entry.

Ventilation was accomplished with fans and by removing windows on the sixth floor. One stairway was kept clear of smoke using positive pressure ventilation.

Six firefighters were injured. Four suffered heat exhaustion, one had chest pains, and the last suffered a cut arm.

INCIDENT COMMAND

Incident Command was established by the first-due engine officer and passed from Battalion Chief 3 to Assistant Chief D. E. Sparks to Deputy Chief D. M. Chamberlin. Acting Fire Chief Perrin provided information to the media.

Chief officers were assigned to sectors for Interior Command, the rear of the building, Medical, Lobby Control, Safety, Motorized Apparatus, and Air Supply. Other sides of the building were assigned to Captains, and a Lieutenant was responsible for rotating companies from combat to rehabilitation. Other sectors were established for medical transportation, staging, investigation, and information for inquiries about building occupants.

Communications were effective, though the communications system was stretched to its limits. Standard radio fire channels were supplemented with cellular telephones, 800 megahertz "trunking" radios, and use of EMS frequencies. All command vehicles in Atlanta are equipped with cellular phones and portable facsimile machines.

Outside agencies on the scene included the Atlanta Police, Atlanta Fulton County Emergency Management Agency, the transit authority (MARTA), Georgia Power (electric), Red Cross, five ambulance company representatives, Department of Public Works, an elevator company representative, and the Department of Public Safety psychologist.

FIRE BEHAVIOR

While many of the outcomes of the Peachtree 25th fire were similar to those expected in serious high-rise fires, the origin and nature of the fire was unusual. The fire originated due to sustained electrical arcing that took place in the electric closet. Apparently the arc lasted for some period of time, since approximately 10 linear feet of bus bar and duct was

not found after the fire and were assumed to have been vaporized. According to reports from building occupants, it would appear that the electrical arc produced an immediate drastic rise in temperature and an instantaneous sustained fire in the electric closet. Post-fire analysis suggested that the electrical arcing produced pressure which resulted in damage to the electric closet metal door frame.

Since the door to the electrical closet was open and the ceiling tiles in the electric closet were probably displaced, smoke, heat, and toxic gases spread rapidly from the closet down the corridor and into the plenum. Smoke damage was extensive throughout the entire sixth floor of the South Tower. Heat damage had an erratic pattern. In some offices, equipment such as typewriters and telephones were completely melted and the interior contents of the offices incinerated. In other offices there was minimal heat damage. The variance in heat damage did not depend on the distance from the fire and did not correlate completely with smoke damage. For example, the office directly across the hall from the electric closet showed no signs of heat damage, though the occupant died from smoke inhalation.

Aside from the corridor, the plenum apparently served as the principal route for the travel of smoke and heat in this fire. The flexible ducts which supplied air to the tenants space were completely burned away in some cases. The air transfer grilles were selectively damaged; in offices that suffered severe heat damage the air transfer grilles were in most cases completely destroyed. A good correlation could be found between the condition of the air transfer grills and the amount of damage to the office space. Other floors were contaminated primarily through fires in electrical closets and smoke spreading through cracks around the doors separating the electrical closets from the corridors. On floors where the North and South Towers were connected, smoke traveled throughout the floor.

Firefighters reported seeing relatively small amounts of actual fire upon entrance to the sixth floor. They did encounter very heavy heat and smoke conditions, however. Firefighters arriving on the sixth floor reported that the knob on the door from the stairway to the elevator lobby

was "glowing red." When firefighters arrived the fire apparently was in a fuel rich condition, and they reported that well into the operation, when ceiling tiles were removed, a "whoosh" would be heard and flames would appear in the plenum space. This would indicate that a large amount of fuel material had accumulated in the plenum area and had not burned for want of oxygen.

Fire damage to other floors was confined to the electrical closet area. Minor fire damage occurred on the fourth, fifth, and seventh floors with major fire damage on the sixth floor. Smoke spread from the fourth to the tenth floor in the South Tower, and there was lighter smoke damage on the seventh and eighth floors of the North Tower.

Conditions on the fire floor and reports from firefighters and survivors would clearly indicate that an untenable atmosphere was created within moments of the fire's outbreak. Any unusual toxicological ramifications associated with the electrical arcing have not been documented to date, although several of the victims apparently were overcome very rapidly. Contamination with smoke of the sixth floor South Tower stairway is thought to be attributed to the stairway door being opened shortly before or during the initial stages of the fire.

OCCUPANT BEHAVIOR

There were several modes of action undertaken by occupants of the sixth floor. Some were trapped in offices, and, due to either their inability to travel past the electrical closet or fire conditions in the hallway, they were unable to leave the floor. Of the approximately 40 occupants on the sixth floor of the South Tower on the day of the fire, one jumped, five died, and approximately twelve were removed by Fire Department aerial apparatus. All the occupants of the fire floor who had not exited by the time of the Fire Department arrival either had to be assisted out of the building by firefighters or died on the fire floor.

Panic did not appear to play any negative role in the outcome of this fire. Surviving occupants ultimately assembled into three groups where they broke out windows and, with the exception of the woman who jumped,

were rescued by the Fire Department either over aerial apparatus or via the interior stairwell with the Fire Department's assistance.

The one occupant who remained in his office throughout the fire without breaking a window died from smoke inhalation. Heat apparently never reached an excessive level in this office -- there was no damage to plastic items stored on bookshelves near the ceiling.

Breaking windows seemed to be the most successful occupant survival strategy for those trapped in this fire. Of the four who died, one remained in a closed office without breaking a window and the others were overcome by combustion products while attempting to escape the floor.

OCCUPANT EVACUATION PLAN

The Peachtree 25th building housed a large number of federal workers. The largest number worked for the U.S. Forest Service, whose regional office was located in the building. Because the Forest Service was the most populous federal agency, and because of their capability and expertise in emergency planning, they administered the occupant emergency plan for the Peachtree 25th building.

Federal Property Management Regulations require that federal workers organize and practice building evacuation exercises. This evacuation planning included fire drills every three to four months. The drills consisted of sounding the alarm and having all building occupants walk down the nearest stairway and assemble at designated areas outside the building. (A complete emergency plan is included in Appendix D.) There were no injuries reported among federal workers.

Building management cooperated in performing these fire drills, but participation among private firms in the building was optional. Building occupants report that with some exceptions, most private companies did not participate in the building evacuation plan or fire drills. The sixth floor of the South Tower was occupied entirely by private companies.

The emergency plan has components for fire, bomb threat, and natural and manmade disasters. The occupant emergency plan at the Peachtree 25th

building appeared to be well organized and successful in that there were no significant casualties among occupants not on the sixth floor of the South Tower.

ADDENDUM: On December 28, 1989, the Peachtree 25th building was cited by the Atlanta Area Office of the Occupational Safety and Health Administration. The charges were for inadequate egress facilities and improper interior finish in the sixth floor South Tower corridor. Other citations were directed to the electrical facilities in the building and work practices on the day of the fire.

LESSONS LEARNED

1. High-rise buildings need automatic sprinklers.

Due to the unusual nature of this fire, there are those who might argue that sprinklers would not have helped. But it is the opinion of the Fire Department and this investigator that even if the sprinklers had not extinguished the fire, their activation would have reduced the intense heat and at a minimum, would have facilitated a less stressful and more rapid removal of victims by the Fire Department.

The code community should require sprinklers in all high-rise buildings - particularly modern, open plan offices, where experience has shown that even where compartmentation exists, serious fires and threats to life safety are to be expected.

2. Evacuating buildings under fire conditions may take longer than evacuation during drills.

While this seems evident, there may be an assumption on the part of those planning evacuation for high-rise buildings that the urgency of an actual emergency would result in faster evacuation. In this fire, evacuation took approximately one and a half minutes longer than during drills, which normally took six minutes.

3. It is unrealistic to assume that occupants of the fire floor will always activate the building fire alarm system.

In this fire, occupants of the fire floor were unable to activate the fire alarm. The alarm system was activated by an occupant of the seventh floor. Without fire detection systems, it is conceivable that reporting a severe fire could be delayed if occupants of the floor above do not investigate or if the floor is vacant, such as during renovations or after hours. Delayed notice to building occupants could trap those people above the fire if stairways fill with smoke or are needed for fire attack.

4. Fire alarm activations in high risk structures deserve an immediate, full response from the fire service.

The first report of this fire was through an automatic alarm signal via the municipal fire alarm system. The Atlanta Bureau of Fire dispatches three engines, two trucks, a rescue unit, and a battalion chief on automatic alarms from high-rise buildings. Many cities, for reasons of convenience or economy, send reduced responses to such automatic alarms in the absence of phone calls confirming an actual fire. Although many calls subsequently were placed to the Fire Department, the first notification and initial dispatch here was for an automatic alarm. Any less than the full dispatch that Atlanta made would have delayed arrival of firefighters and equipment, resulting in delayed rescues.

5. Fire drills work; they should be required for high-rise office buildings.

The Peachtree 25th building practiced fire drills. The federal tenants were required to formulate occupant emergency plans. The opportunity to practice evacuation and the heightened awareness of fire safety from participating in the plan were cited by federal workers as preventing additional casualties in this fire.

6. Hazardous areas should be separated from the exit corridor by fire resistive construction.

Separation of hazardous areas such as electrical rooms should be considered as a retrofit item in structures where a fire or similar situation could be expected to cause an immediate threat to the ability of occupants to reach exits.

7. The arrangement of exits in high-rise office buildings is often such that the contamination of a single area by fire products can render multiple exits unusable.

The design of egress in high-rise office buildings should reflect this reality. Provisions should be made for access to exits without having to use the central corridor. Provisions are being considered to add additional cross-overs from the North to the South Towers in the Peachtree 25th building.

8. Breaking windows was an effective strategy in this fire.

Breaking windows is generally discouraged in high-rise office buildings. In this fire, breaking windows was clearly associated with survival. It let smoke escape over the heads of people trapped at windows and gave them enough air to breath. In cases where occupants can be reached by fire department aerial equipment, breaking windows may be an effective strategy when trapped in an office.

In consideration of this fire, and the other considerations such as differing window materials and air movement patterns in high-rise buildings, the fire service should attempt to issue more definitive guidance on windows to those who work in high-rise offices.

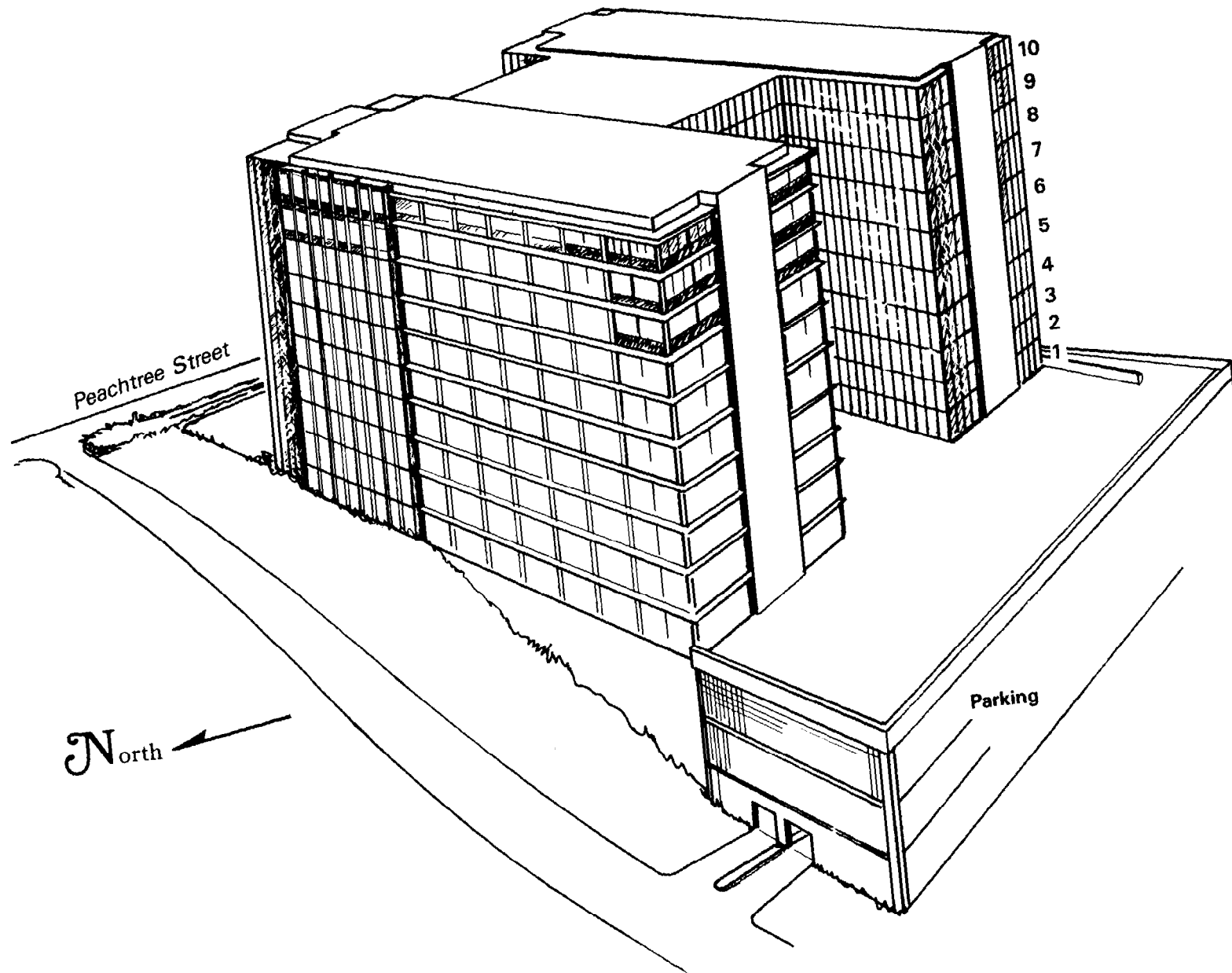
9. Being in reach of fire department ladders is no guarantee of safety.

While fire department access was critical to limiting the number of deaths in this fire, the outcome might not have been significantly less deadly if the fire had occurred on the second floor. In fact, it could be argued that a fire on a lower floor could have created more problems by threatening more occupants on upper floors.

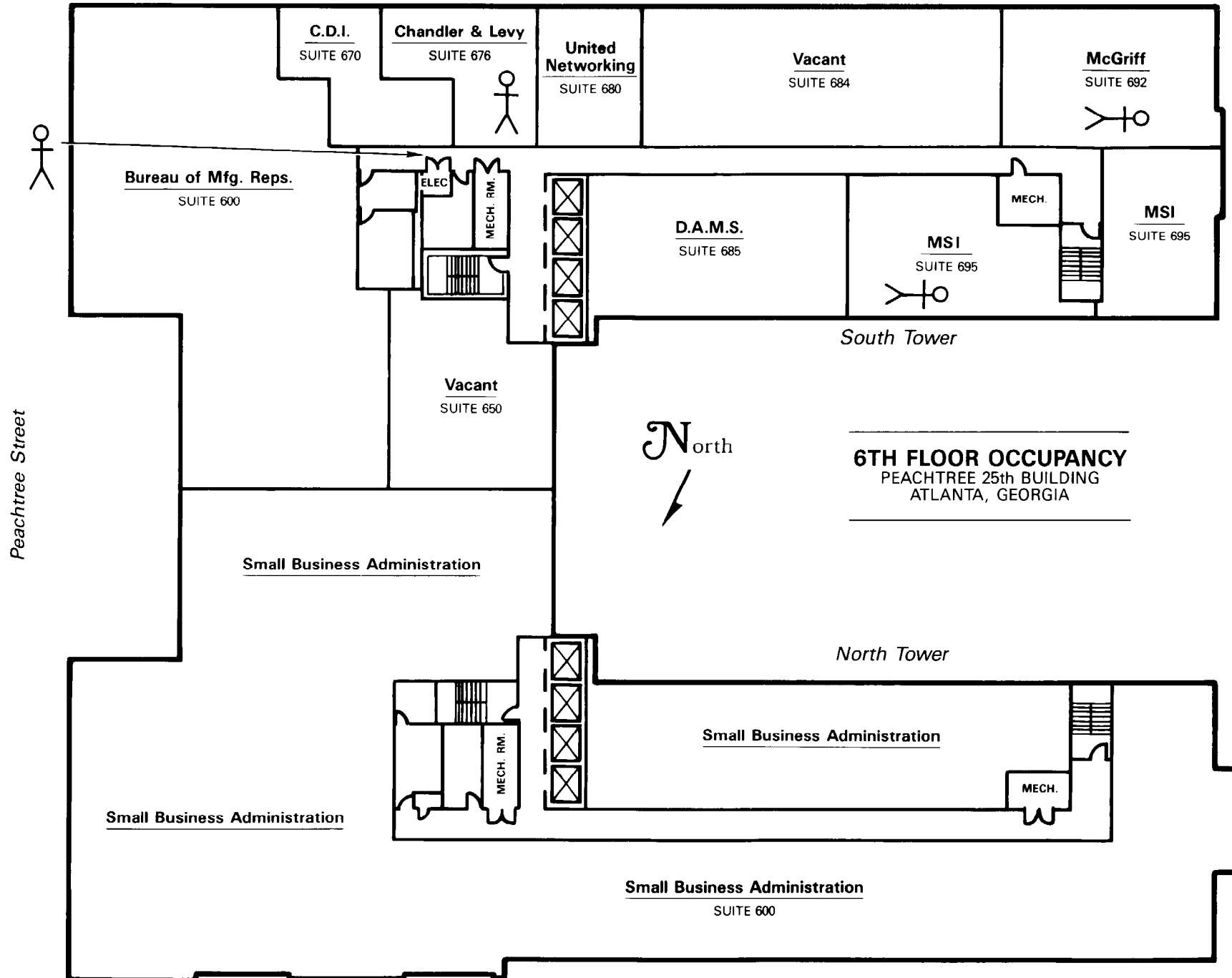
Appendices

- A. Site Drawing
- B. Floor Plan Showing Location of Victims, Sixth Floor
- C. Post-fire Statement of Electrician
- D. U.S. Forest Service Occupant Emergency Plan (excerpts)
- E. Atlanta Department of Public Safety Report on the Fire
- F. General Services Administration (GSA) Fire Report
- G. Toxicological Reports on the Fire Victims
- H. Photographs (used with permission of Nick Arroyo of the Atlanta Consitution).
- I. List of Slides/Photographs in Master Report File

APPENDIX A
Peachtree 25th Building



APPENDIX B



Shoot at 97070

APPENDIX C

Chris Folsie

7-1-89

by J. H. Moon

BUREAU OF FIRE

7-1-89 DATE

3:10 PM TIME

STATEMENT OF: Chris Folsie (NAME)

white
RACE

Male
SEX

11-25-66
D/O/B

RESIDENCE ADDRESS

NO. STREET

APT. CITY COUNTY STATE

BUSINESS ADDRESS

1718-1720
NO. STREET

Peachtree St.
APT. CITY COUNTY STATE

RESIDENCE PHONE

BUSINESS PHONE

FIRE# 18067 FILE# 89-323 DATE OF FIRE 06-30-89 TIME OF FIRE 1030

ADDRESS 1718 Peachtree St.

I DO HEREBY VOLUNTARILY AND FREELY MAKE THE FOLLOWING STATEMENT IN REFERENCE TO THE CAPTIONED FIRE.

Me & Guy & Greg were trying to find a problem with the Electricity on the 6th floor South tower, some of the lights & Computers were off, Guy went to the Equipment in the front of the bldg. and opened a panel with ^{three} (3) 200 amp fuses he said that he had blown a fuse asked me if I could get ~~h~~ one, when I got back he had already pulled the +

WITNESSED:

SIGNED: Chris Folsie

On the top all the lights that were on were still out all that were on were still on the power was still on the Fuse bars & Guy held the fuse in the middle on the Cord board he put one end of the fuse in a 1. on

Statement of CHRIS FALSE (Continued)Page 2 of 2 Pages

still holding the fuse in the middle
 he touched the other end to the bar it made
 a blue spark Greg & I backed up into the
 hall Guy gave the fuse one hard push
 when it went into the bar it just sizz
 and flashed a light so bright it lit up
 the hallway & blinded me I couldn't see
 anymore after that.

SIGNED:

Chris False7-1-89

DATE

WITNESSED:

[Signature]07-01-89

DATE

APPENDIX D

United States
Department of
Agriculture

Forest
Service

R8

G-A 2385z2

Atlanta, GA

Reply To: 6400 Property Management

Date: September 29, 1988

Subject: Occupant Emergency Plan

To: All Government Agencies,
Peachtree-25th Building
Directors. NFS

Here are copies of the Occupant Emergency Plan for Federal Employees in the Peachtree-25th Building. This plan is required under FPMR 101-20.504-2. and GSA Bulletin FPMR D-179 Public Buildings and Space, dated November 18, 1980.

Each unit should schedule a safety meeting to discuss this plan in detail with their employees. A copy should also be posted on your unit bulletin board.

When Control Personnel listed in Exhibit "D" are transferred, reassigned, resign. etc., contact USDA-Forest Service, Procurement and Property Unit. Property Group. 347-2609. It is very important that we have personnel designated to fill positions at all times.

Your attention is called to Section II of the plan on evacuation of the handicapped. Please furnish a current list of handicapped persons in your unit, along with the designated persons giving assistance.

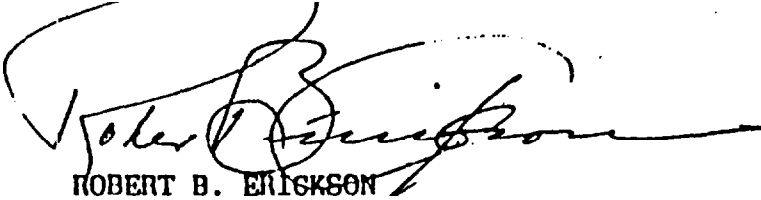
After each evacuation. a critique will be held in Room 162 ten minutes after the all clear is sounded. The Floor Monitor and Alternates are urged to attend this meeting.

A meeting will be held in Room 162 on October 13, at 1:00 P.M. to review the plan and to familiarize control personnel with it. The following should attend the meeting:

- Coordinator
- Floor Team Coordinator
- Floor, Monitor
- One Representative from each Government Agency
- Stairwell Monitors
- Bullhorn Team
- Medical Team

If any of the above are unable to attend, they should be represented by their Alternate. Each Agency will be responsible for the training of their Area Monitors.

You are urged be represented at this meeting.

A handwritten signature in black ink, appearing to read "Robert B. Erickson", written over a horizontal line.

ROBERT B. ERICKSON
Deputy Regional Forester
Designated Official,
Evacuation Plan

OCCUPANT EMERGENCY PLAN FOR
PEACHTREE - 25th BUILDING

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OCCUPANT EMERGENCY PLAN**PEACHTREE- 25TH BUILDING****I. EVACUATION PLAN**

The plan provides for actions to be taken for the protection of life and property during all types of emergency situations. In the event of evacuation the following (fire, bomb or civil defense) plan will be used.

1. All stairwells, front and rear, will be used for evacuation of the building. The elevators will not be used. When the alarm is sounded personnel will use the exit nearest them. Evacuation floor plan, Exhibit "A" in the same for all floors.
2. The evacuation alarm is a loud horn, signal. (Do not confuse this with the alarm ring on the elevator doors).
3. When the horn sounds, evacuate the building quickly, but do not run. Do not panic.
4. Persons who walks slowly or have difficulties with stairs should walk to the right.
5. Leave the vicinity of the building so that the firemen will have access to the building. Complete evacuation process to designated area even though alarm signal ceases to sound.
6. The designated evacuation area is the parking lot behind Woolworth on North side of 25th street.
7. Evacuation of the building will be as follows:
 - a. Front stairwell - (See Exhibit B)

North Tower - Go down stairs and exit on P-3 level in the garage and cross 25th street to Woolworth's Parking Area.

South Tower - Go down stairs and exit on P-4 level in the garage and cross 25th street to Woolworth's parking Area
 - b. Back Stairwells - (See Exhibit B)

North and South Towers - Go down rear stairs and exit on P-2 level in the garage and cross 25th street to Woolworth's parking area. In the event severe smoke or fire prohibits your egress to P-2 level return to either the 3rd, 6th or 9th floor, re-enter the building and proceed to front stairwell.

II. Evacuation of Handicapped

- a. Handicapped people who are not capable of negotiating a stairway in a fire emergency should proceed to a point adjacent to the nearest front exit stairway of each tower and await further instructions . If the fire emergency is at the front of tower handicapped person is located. they should proceed to exit, on other tower or to the rear stairway exit.
- b. Elevators will not be used to evacuate the handicapped until the fire department determines that they are safe for use. If the fire department recommends evacuation prior to its arrival, or when a unilateral decision is made by the designated official of the Occupant Emergency Plan to evacuate, the elevators will be used with the assistance of the Building Management personnel.
- C. Each Agency shall assign a sufficient number of employees to stay with the handicapped to give special help and assistance as needed. It may be necessary for each Agency to carry their handicapped down the stairwells in an extreme emergency. It will not be necessary to carry down unless instructed to do so by the designated official. The communications team will notify the handicapped when the all clear is given.
- d. In order to evacuate the handicapped as quickly as possible, it will be necessary for the coordinator of the Occupant Emergency Plan to maintain a current list of handicapped employees. Each Agency is responsible for furnishing this list along with the persons giving assistance and keeping this list up-to-date.

This list shall be sent to Donald L. Ratcliff, U.S. Forest Service, Room 1099.

Handicapped 's Names
Name of person giving assistance
Location in Building

A list of the handicapped will be given to the Floor Team Coordinator and each Floor Monitor.

- e. During any evacuation of the building, the Floor Monitor shall determine if any handicapped persons are present on their floor' end report any to the Floor Team Coordinator.
- f. If an Agency is being visited by a handicapped person, that Agency will be responsible for assigning sufficient employees to assist in evacuation when necessary.

III. EVACUATION FOR TORNADOS OR SEVERE WEATHER

This section is to establish procedures for employees protection in the event a tornado or severe weather threatens,

The Forest Service fire dispatcher will monitor the Weather Service Broadcast Station for a tornado watch or other emergencies. The fire dispatcher has a receiver that is electronically turned on by the tone used by the weather service when they broadcast an alert. The dispatcher on duty will notify the Occupant Emergency Plan Coordinator who, in turn will notify the Designated Official of the conditions. If the conditions warrant, the Designated Official will give the coordinator instructions to evacuate the Building.

EVACUATION PROCEDURES

- a. The Occupant Emergency coordinator will notify each Government Agency to evacuate the building.
- b. Each Agency will be responsible for spreading the word to everyone in their Unit.
- c. The fire alarm will not ring.
- d. Proceed immediately to Parking Level 1 by stairs.
- e. Stay away from windows and glass doors.
- f. Remain in P-1 until all clear is given.
- g- Do not go outside..
- h. The Occupant Emergency coordinator will establish radio communication to keep the Designated Official informed of local weather conditions.

Remember : No fire alarm will ring. We are heavily dependent upon word-of-mouth to spread the news.

BOMB THREAT PLAN

IV. In the event of a bomb threat, the following plan will be used.

Should any employee receive a bomb threat telephone call, the following actions should be taken:

1. Listen carefully and record the exact words as they are spoken.
2. Attempt to fix, as closely as possible, the caller's age, race, education, sex, etcetera.
3. Try to obtain other information from the caller such as time the bomb is set to go off, type of bomb, location of bomb in the building, etcetera.
4. After above steps have been taken, call designated Forest Service Official or Alternate as shown below

Robert B. Erickson	Tel. No.
Marvin C. Meier	Tel. No.
Leroy Jones	Tel. No.

The designated official will determine what action is to be taken and will notify the Forest Service Coordinator or Alternate as shown below:

Donald L. Hatcliff	Tel. No.
George P. Stevens, Alternate	Tel. No.
David D. Trull, Alternate	Tel. No.

6. If it is decided to evacuate the building, the coordinator will notify the Building Manager to sound the evacuation signal. When signal is heard, follow instructions in evacuation plan.

V. CONTROL PERSONNEL AND DUTIES

This part of the plan will be distributed only to each person listed as control personnel. Also, copies shall be sent to each Unit for posting on bulletin boards.

When there is planned absence of both the primary and alternate control personnel, the last to leave should designate someone to fill the position during their absence.

It will be the responsibility of each Forest Service Unit and other Agency offices to notify the Forest Service Regional Property Management Officer when there are personnel changes affecting the assigned control personnel. The Property Management Officer is located in Room 1099, telephone 347-2609.

Duties of Control and Floor Personnel

- a. Designated Official - The highest ranking official of the primary occupant agency or an alternate high ranking official selected by agreement of occupant agency officials. The Designated Official is responsible for developing occupant protection plan, coordinating staffing and training for the protection organization, and execution of the plan as well as deciding the course of action to be taken during emergencies.
- b. Occupant Emergency Coordinator - The Occupant Emergency Coordinator (OEC) is responsible for implementing the overall plan of action. The OEC coordinates the plan to include: selecting, training, and organizing an adequate staff for conducting emergency operations; and for directing and supervising the activities of the Occupant Emergency Organization during the emergency. The coordinator reports to the Designated Official and keeps the person apprised of events.
- c. Floor Team Coordinator - The Floor Team Coordinator supervises and expedites the planned controlled movement of all building occupants, monitors the staffing of personnel for the Occupant Emergency Organization and coordinates employee bomb search of occupant space. The Floor Team Coordinator supervises the activities of the Floor Monitors.
- d. Floor Monitor - The Floor Monitor has, on the floor to which assigned, the same responsibilities as the Floor Team Coordinator. In carrying out these responsibilities, the Floor Monitor supervises the activities of the following members of the Occupant Emergency Organization. The floor monitor determines if there are any handicapped persons on their floor and if so, reports this to Floor Team Coordinator.

- (1) Area Monitor - Coordinates the evacuation of the area assigned and will secure and lock all exit doors when rooms are cleared.
- (2) Handicapped Monitor - The Handicapped Monitor ensures that handicapped persons are safely evacuated and attended to during the emergency period.
- (3) Stairway Monitor - The Stairway Monitor ensures that stairway routes are safe for purposes of evacuation
- (4) Elevator Monitor - The Elevator Monitor ensures that elevators are restricted to evacuating handicapped person from the building.
- (e) Medical Coordinator - The Medical Coordinator is responsible for training and equipping personnel assigned to perform medical assistance or first aid services in an emergency and for supervising emergency first aid or medical self help operations within the building during an emergency until local emergency personnel arrive.
- (f) Damage Control Coordinator - The Damage Control Coordinator is responsible for turning off appropriate utilities when required by the emergency situation.
- (g) Damage Control Team - Under the direction of the Damage Control Coordinator, the Damage Control Team is responsible for controlling utilities during an emergency. During emergencies they report to the Damage Control Coordinator in the basement or other predesignated location
- (h) Communications - A system of communications will be extremely important during emergencies. Designated Officials will need time and accurate information upon which to decide what course of action to implement and communicate this plan to members of the organization. Consequently, existing means of communication in a facility will have to be analyzed to determine how it can be used for emergency notification.

VI. General Information

- a. Room 162, Forest Service Conference Room, first floor, is designated as Command Post. The Occupant Emergency Coordinator will remain in room 162 until Control personnel arrive.
- b. -A critique will be held in the Command Post, Room 162, ten minutes after all clear is sounded. Designated official, Occupant Emergency Coordinator, Floor Team Coordinator, Floor Monitors, GSA representative and building manager will attend.
- c. The Medical Team will report to Room 162 when alarm sounds.

Occupant Emergency Organizational Chart

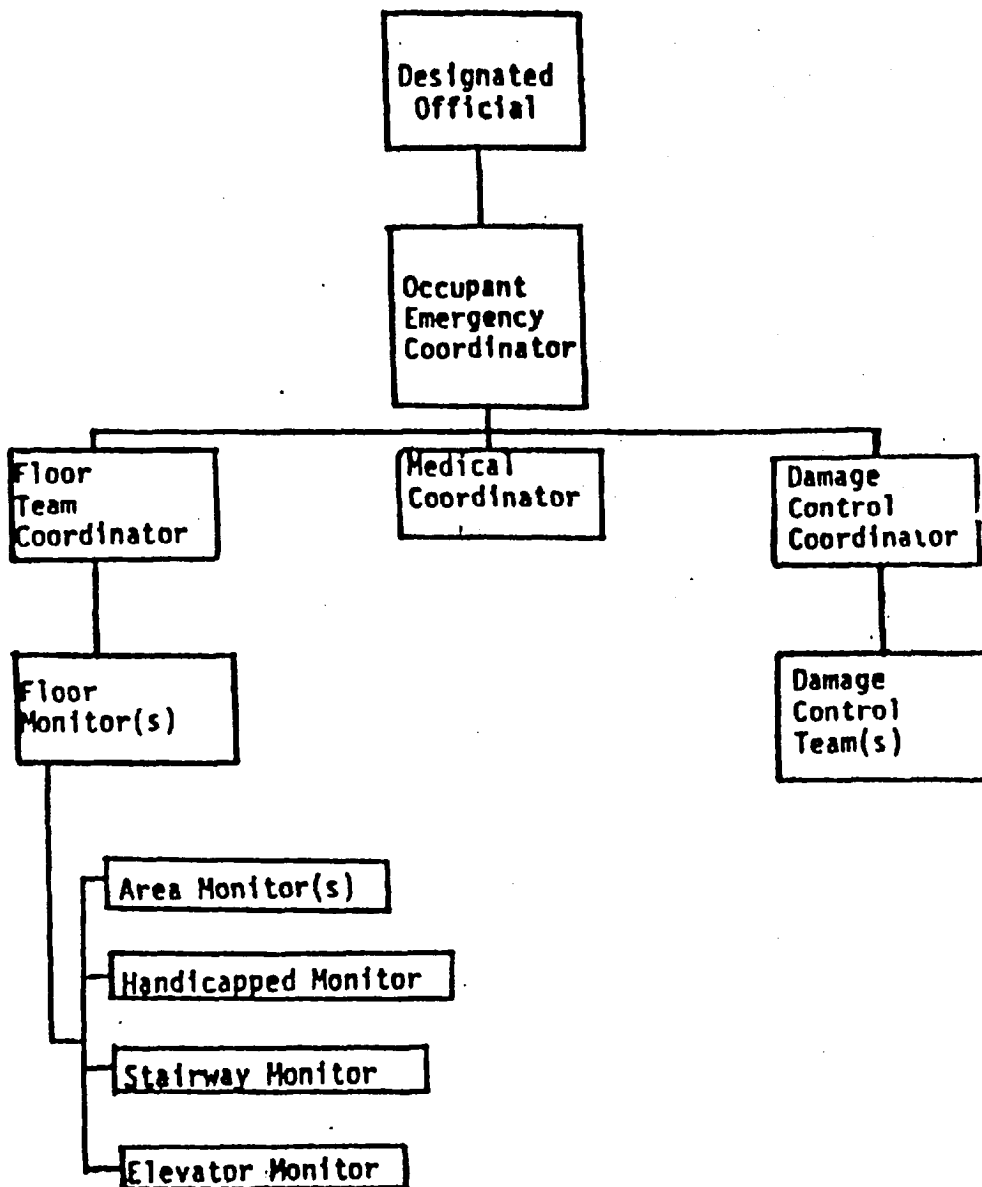
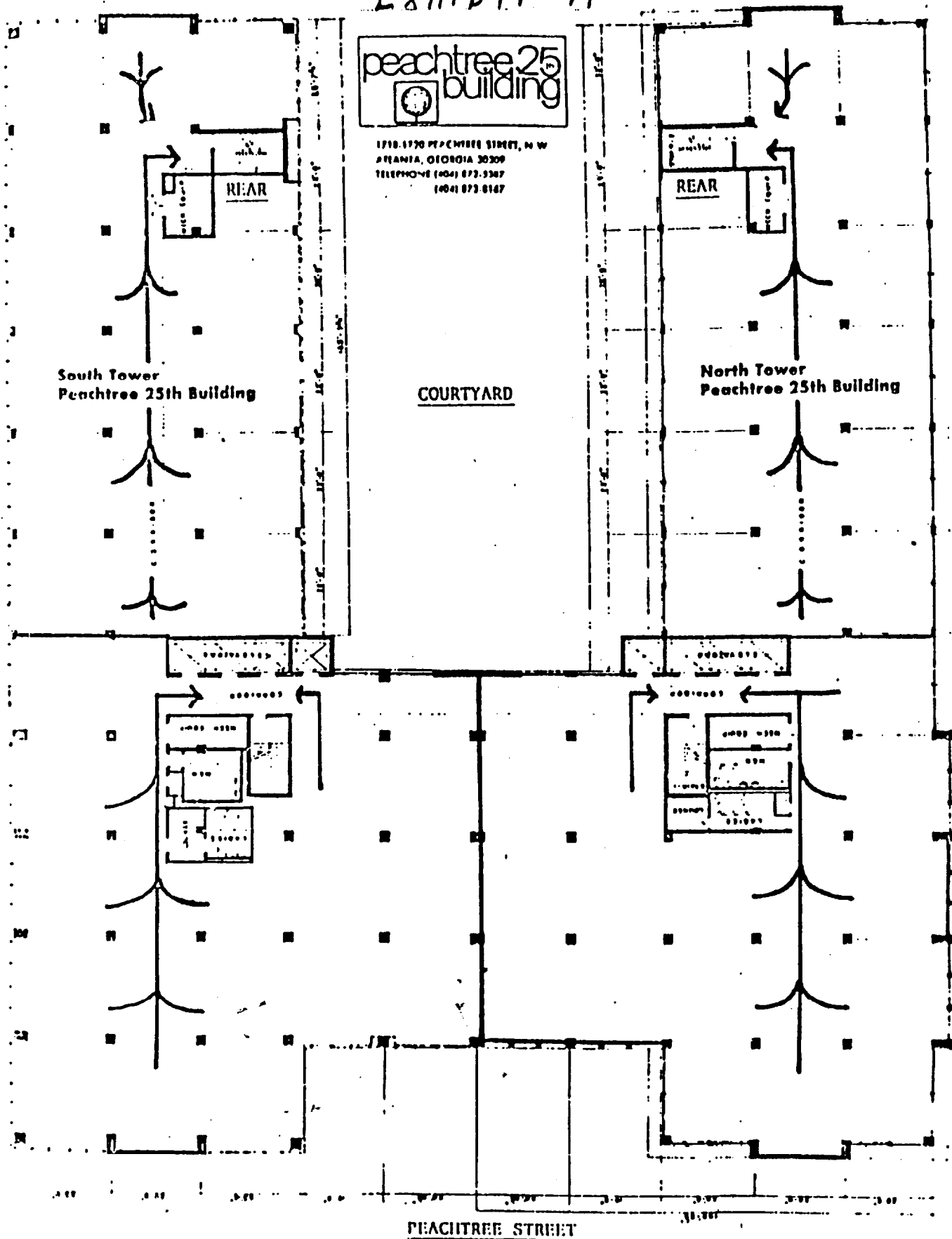


Exhibit "A"

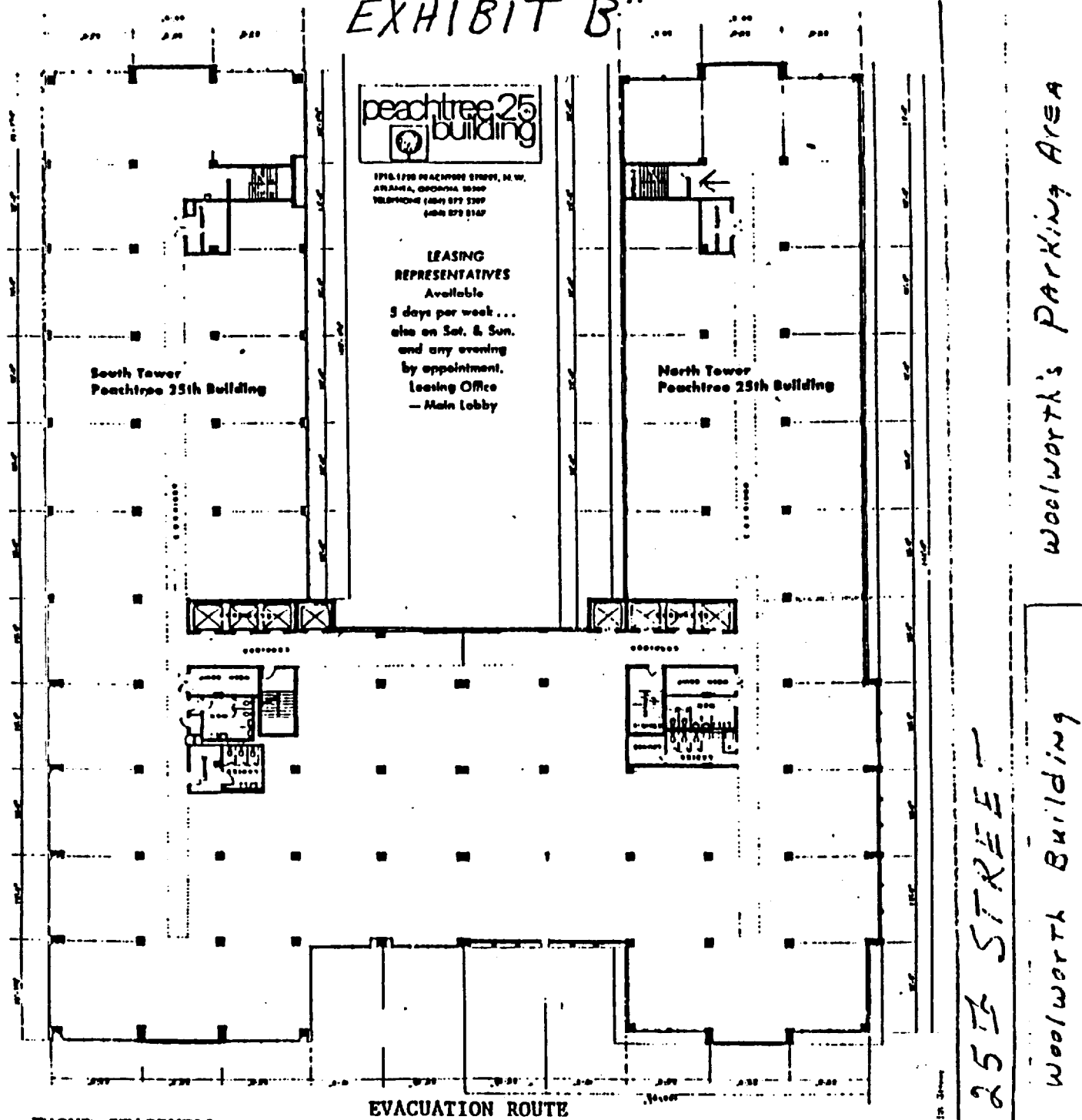


PEACHTREE STREET

Shoot at 9770

Appendix D (cont'd)

EXHIBIT "B"



FRONT STAIRWELL

- NORTH TOWER** - GO DOWN STAIRS AND EXIT ON P-3 LEVEL IN THE GARAGE AND CROSS 25TH STREET WO WOOLWORTH'S PARKING AREA.
- SOUTH TOWER** - GO DOWN STAIRS AND EXIT ON P-4 LEVEL IN THE GARAGE AND CROSS 25TH STREET TO WOOLWORTH'S PARKING AREA.

BACK STAIRWELL

- NORTH AND SOUTH TOWERS** - GO DOWN REAR STAIRS AND EXIT ON P-2 LEVEL IN THE GARAGE AND CROSS 25TH STREET TO WOOLWORTH'S PARKING AREA. IN THE EVENT SEVERE SMOKE OR FIRE PROHIBITS YOUR EGRESS TO P-2 LEVEL, RETURN TO THE 9TH FLOOR, RE-ENTER THE BUILDING AND PROCEED TO FRONT STAIRWELL.

PEACHTREE STREET

APPENDIX E

M E M O R A N D U M

TO: Shirley Clarke Franklin
Chief Administrative Officer

FROM: George Napper, Commissioner
Department of Public Safety

Tom Weyandt, Commissioner
Department of Community Development

SUBJECT: Report on Fire at 1718-20 Peachtree Street, N.E.
June 30, 1989

DATE : August 17, 1989

On June 30, 1989 one of the worst fires in the history of Atlanta occurred at 1718-20 Peachtree Street, N.E., Atlanta, Georgia (hereinafter Peachtree 25th Building). Five people died. However, other lives were saved by the prompt and professional response of over 120 firefighters and over 20 support personnel. The details of the fire and the City's response to it are outlined below.

Over the last several weeks, staff from the Bureau of Fire Services of the Department of Public Safety and the Bureau of Buildings of the Department of Community Development have searched records for documentation of building permits, building plans and inspection reports. These documents and the analysis of the building history are summarized here. The documents themselves have been consolidated for inspection in the appropriate offices.

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RESPONSE TO ALARM

The Bureau of Fire Services (hereinafter BFS) received an alarm on June 30, 1989 at 10:30 A.M to respond to a fire at the Peachtree 25th Building, Atlanta, Georgia. The alarm was received from alarm box 158 (inside pull) fronting 1718-20 Peachtree Street, N.W.

The first responding BFS units arrived on the fire scene at 10:34 AM on a signal 33. (A signal 33 means that a fire was reported). The units which responded are as follows:

RESPONSE	1st Alarm TIME-10:30 AM	2nd Alarm TIME-10:35 AM	3rd Alarm TIME-10:43 AM	4th Alarm TIME-11:16 AM
TRUCKS:	29-11	8-4	16-12	26-10
ENGINES:	23-15-29	11-8-19	26-16-4-12	22-6
RESCUE:	R-1/R-15		R-8 (11:00 AM)	R-9
LIGHT UNIT:	C810/SQ5			
CHIEF	903	900	902, 401	906
INVESTIGATORS:	732,735,733 730 (11:49 AM)	-504,500		

RESPONSE	5th Alarm TIME-11:28 AM	6th Alarm TIME-15:26 PM	7th Alarm TIME-20:00 PM
TRUCKS :	1	21-2	38-34
ENGINES:	17-1	21-22-2	38-39-13

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5th Alarm
(Cont'd)

6th Alarm
(Cont'd)

7th Alarm
(Cont'd)

RESCUE:

R-9

LIGHT UNIT

CHIEF

Others responding included the Atlanta Bureau of Police Services; Atlanta Gas Light Company; Georgia Power Company; George Napper, Commissioner of the Department of Public Safety; from the Bureau of Fire Services: Chief T. M. Perrin, Acting Fire Chief; W. L. Minor, Assistant Chief in Charge of Communications; H. B. Thornton, Chief of Inspections; J. A. Haynie, Chief of Investigations; A. D. Bell, Assistant Chief in charge of Fire Safety Division; William Tucker, Chief of Communications; and Mercer Wade, Liaison over Motorized Equipment. Also present were Dr. Guy Seymour, Director of Psychological Services for the Department of Public Safety; Sandra Walker, Chief of Communications, Department of the Mayor; and Personnel from the Public Affairs Office of the Department of Public Safety. in addition, staff from the Bureau of Buildings who responded to begin the post-incident evaluation included Norman Koplon, Director of Buildings; Leon Dover, Chief Electrical Inspector; Mike Scott, Chief Building Inspector; and Frank McKinney, Area Building Inspector.

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CAUSE OF FIRE

It appears that the fire was started when an electrician employed by Lite Tech Electric Company attempted to replace a 200 amp fuse in the bus duct while the electrical system was on. The building superintendent reported that the building experienced "brown outs" earlier the morning of the fire. "Brown outs" are defined as lights dimming, low voltage, computers malfunctioning, etc. While the electrician was in the process of changing the fuse, a short in the electrical system occurred causing an explosion which generated intense heat and dense smoke. The electrician was killed.

TYPE OF BUILDING

The subject building contains ten (10) stories and four (4) underground parking decks. The building construction is contemporary concrete/glass, with a flat tar/gravel roof. The north tower of the building was permitted in 1962 and the south tower in 1968.

BUILDING FIRE SAFETY FEATURE;

The building has a standpipe system, fire extinguishers located throughout, and a fire alarm system, with pull stations on each floor with an emergency generator supplying emergency systems.

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The alarm system is connected to Fire Bureau Communications. The alarm and fire protection/fire safety features were in compliance with Code requirements at the time of the last inspection.

There is corridor smoke detection on the fifth floor and tenth floor only, which was installed as required by the Director of Buildings during specific tenant finish work on those floors.

An approved evacuation plan is on file. On September 22, 1980, a conference was held with the building management on a plan for evacuation. The evacuation plan was subsequently developed and has been updated four times (03-31-82, 10-02-85, 09-29-87, 09-29-88). There were no deficiencies in the evacuation plan.

The Inspection Records reveal fire drills were conducted on 09-22-80 and 10-16-86. Also a fire safety education program was conducted by the Fire Bureau on March 4, 1982,

The search of the building permit files at this time fails to reveal the issuance of a permit for the construction of the tenant spaces on the sixth floor in the vicinity of the fire. Interior walls in this area appear to have been added sometime between 1982, when the last plans for the sixth floor were reviewed, and 1989, when the fire occurred. A review of

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inspection records for the building reveals that there have been violations of various provisions of the fire code over time. However, all appear to have been brought into compliance with the applicable code within reasonable times after citations were made. Further, there were no outstanding citations at the time of the fire.

DAMAGE: TO PROPERTY, INJURIES AND LOSS OF LIFE

The owners of the 25th Street Building have estimated their loss at 2.1 million dollars to the building and 500 thousand dollars to the contents.

Very dense smoke causing zero visibility and intense heat, generated initially from the burning of the electrical system itself, caused considerable damage to the 6th Floor area of the south tower. Also, burning electrical insulation in the exit corridor, burning wallpaper on the exit corridor walls and burning carpet in the exit corridor, caused extensive damage to the 6th floor... Very little office furniture and ordinary combustibles were consumed. The far west end of the 6th floor was unoccupied and contained no office furniture. Over 60 feet of the floor carpet in the hallway where the fire originated was consumed. Smoke traveling through the heating and air conditioning

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venting system caused smoke damage to adjacent floors. Water damage occurred mainly on the 6th floor and light to moderate damage on floors below. The electrical bus ducts were damaged on the 4th, 5th, and 6th floors. Approximately ten feet of the buss duct were completely consumed between the 5th and 6th floors. Also, minor damage was sustained in parts of the lower bus duct.

It is estimated that forty (40) people were on the 6th floor at the time of the fire. Nineteen (19) people were rescued by Bureau of Fire Services personnel and received medical attention at area hospitals. There were two (2) people dead on the fire scene (DOS) on the east side of the building on the 6th floor, two (2) other people were found unconscious on the 6th floor, west side of the building and were transported to Piedmont Hospital where they were pronounced dead. One (1) other person was also found on the east side of the building and was transported to Piedmont Hospital and died there on July 3, 1989. The total number of fatalities were five (5).

Six (6) firefighters were injured combating the fire and implementing rescue procedures:

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AFTERMATH OF THE FIRE

The City required that certain conditions be met before the owner of the 25th Street Building could reoccupy the North Tower of the building. These conditions included the following: (1) certification from an electrical contractor regarding electrical systems, exit signs and the emergency generator, (2) construction of floor to ceiling barricades to prevent access to the South Tower on certain floors, and (3) certification by an alarm company that the alarm system was completely operational. All of these tasks have been completed. Authorization was given to occupy the North Tower on July 3, 1989.

CONCLUSION

The City of Atlanta responded to the fire appropriately in all circumstances. The team effort displayed as well as the bravery of individuals helped greatly to minimize the loss of life. As in any disaster there is a search for answers to understand why it happened but more importantly, for ways to prevent a future occurrence. In that regard, we offer the following suggestions to minimize electrical fires:

- (1 Perform periodic maintenance of electrical equipment including infrared scanning to

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locate hot spots in the system;

- (2) Increase safety training through a mandatory electrical journeyman license program:
- (3) Locate high temperature heat detectors on buss duct in each electrical room that will disconnect the down stream overcurrent device;
- (4) Install ground fault detectors on the electrical system.
- (5) Install sprinkler systems, in that they would be of significant value in the overall control of such an incident and would minimize injuries and deaths: though installing sprinklers in the electrical room, would be of questionable value.

AUG 22 1989

MEMORANDUM FOR THOMAS E. DAVIS
 ASSISTANT REGIONAL ADMINISTRATOR
 PUBLIC BUILDINGS SERVICE (4P)

FROM: WALT DAVIS
 REGIONAL ADMINISTRATOR (4A)

SUBJECT: Appointment of Board of Investigation
 (Fire Incident of June 30, 1989)

A serious fire occurred at the Peachtree Street Building, 1718 Peachtree Street, Atlanta, Georgia, on Friday, June 30, 1989. There has been no estimate placed on damages at this time.

I hereby appoint the following individuals as members of an Ad Hoc Board of Investigation under the provisions of GSA Handbook, Accident and Fire Prevention - General (FNS P 5900.25, Ch. 6-4):

President	Edward A. Driver	District Manager, RPMSD 4PMD-A, Atlanta, GA
Recorder	Vicki Note	Secretary, RPMSD Atlanta, GA
	Gerald Rust	Chief, Safety & Environmental Br., 4PMS Atlanta, GA
	Fred A. Creighton	Chief, Space Management & Acquisition Br., 4PEB R.E.D., 4PE, Atlanta, GA
	Sheldon S. Hammond	Electrical Engineer Project Operations Br.- Design, D&C Div., 4PCT Atlanta, GA
	Riley E. Loyd	Asst. Field Office Mgr. RPMSD, 4PM-GL Atlanta, GA

II. Description of the Fire Incident:

On June 30, 1989, an alarm was received at the Atlanta Fire Department at 10:28 a.m., having been transmitted by activation of a pull station at the Peachtree 25th Building.

The fire was located on the sixth floor of the south tower of the two tower structure. The fire originated in the electrical closet while a fuse was being replaced by an electrician. The electrical work appears to have been performed on a "live" panel. The electrician was working on the electrical closet trying to correct previously reported electrical problems. The approximately twenty year old 480 volt panel is assumed to be original building equipment. The panel served the vertical 3-phase bus bar and contained 200 ampere fuses.

It appears that the removal of one fuse established an arc on the phase. The arc was of sufficient power to ionize the air around the circuit. This may have started the fire. The explosion of the fuse during replacement and subsequent fuse explosions created a fire of such intensity to cause structural failure of the electrical closet walls. It appears that the other protective equipment (i.e., switch gear and switch panel) did not have sufficient time to react prior to the fuse replacement and the ensuing explosions.

The electrician was killed as were four others. One fatality was found in the room directly across the corridor from the electrical closet. The victims, other than the electrician, were overcome by smoke. Smoke infiltrated offices where corridor doors, solid wood doors, were opened by the occupants during the fire or just happened to be open. Generally, the corridor office doors did not have closers.

The electrical closet access opened into the corridor. The corridor wall covering opposing the electrical closet ignited. The corridor wall covering did not burn evenly but oscillated down the corridor length. The burn pattern is to the floor opposite the electrical closet, moved upward as it passed the elevator lobby, down again past the elevators and finally raises again toward the end of the corridor. The carpet in the corridor was burned to the concrete at the areas the wall covering burned to the floor.

The corridor walls were gypsum board with at least one layer of paint, covered by a textured vinyl wall covering and again covered by a suede material. The Fire resistance' rating and smoke development rating of the interior finish is being questioned. No federally occupied floors have similar interior finishes.

The fire department arrival time was 10:31 a.m. (3 minutes). The fire department extinguished the fire at the end of the corridor. Exterior fire forces rescued occupants through windows using ladder trucks.

III. Damages:

The Peachtree 25th Building consists of a north and south tower connected by corridor and office space. The building footprint resembles the letter "H". The fire was contained by fire resistive construction to- the south tower sixth floor. Government tenants in the north tower were not subject to fire or smoke damage. The damage to federally occupied space in the south tower was as follows :

Forest Service	7th, 8th, 9th & 10th Fl.	Smoke Damage
Forest Service	3rd Fl. Storage	Water Damage
Forest Service	1st Fl. Conference Rm.	Water Damage
ICC	3rd Fl.	Water Damage

The federal occupants of the south tower were relocated to the north tower (doubled up) or to lessor provided space near the Peachtree 25th Building. Some Federal occupants were put in travel status to complete field assignments.

No estimates of damage are available from the lessor. The damage to the sixth floor south tower will require complete reconstruction. The lessor is replacing the entire south tower electrical busway and switch gear to eliminate fuses. The lessor will upgrade the fire alarm system and provide automatic sprinklers throughout both the north and south towers.

IV. Summary of Recommendations:

Due to this property being lessor-owned, limited damage to Government tenant space, and lessor retrofitting the building firesafety systems the number of recommendations is few.

1. Regional Office should ensure that interior finishes are not stacked or layering of finishes is limited.
2. Central Office may wish to evaluate, through the National Bureau of Standards, the effect of layered interior finishes.

Sheet # 97070

GSA FIRE INCIDENT REPORT

REPORTS CONTROL SYMBOL

PB-40

SECTION I - INCIDENT (Complete for all incidents)

A	TYPE OF TRANSACTION (Check one)									
	<input checked="" type="checkbox"/> NEW REPORT			<input type="checkbox"/> MODIFY REPORT			<input type="checkbox"/> DELETE REPORT			
B	INCIDENT NO.		REGION NO.		MO.	DAY	YR.	DATE OF WEEK		ALARM TIME
	111111		104		06	30	89	Friday		10:30AM
C	BUILDING NAME AND ADDRESS (Street, City, State, ZIP Code)					BUILDING NO.				
	Peachtree 25th Building					6A233577				
	1718 Peachtree Street					FIXED PROPERTY USE (Office, warehouse, etc.)				
	Atlanta, Georgia					MOBILE PROPERTY TYPE				
D	TYPE OF INCIDENT		OCCUPANTS WERE (Check one)							
	11		<input type="checkbox"/> NOT EVACUATED <input checked="" type="checkbox"/> EVACUATED <input type="checkbox"/> RELOCATED <input type="checkbox"/> BOTH B AND C							
E	DID THE FIRE DEPARTMENT RESPOND? (Check one)					FIRE DEPARTMENT CALLED VIA		FIRE DEPARTMENT RESPONDED WITHIN MINUTES OF NOTIFICATION		
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					11		06		
F	BRIEF HISTORY OF INCIDENT (Cover all important details - attach additional sheets as needed. Photos and/or sketches may be included.)									
	The fire started in the South Tower electrical closet; Fire Department received the alarm at 10:30 AM and arrived at the fire scene at 10:35 AM. Fire Department rescued employees from the 6th floor. Fire Department said there was relatively little flame, and they had it under control within 45 minutes, and teams made a three-hour search of the building.									
G	ACTION(S) TAKEN AND RECOMMENDATIONS TO PREVENT RECURRENCE									
	(See Attached Letter From American Management Co.)									
H	PERSONNEL	NO. OF INJURIES		NO. OF DEATHS		LIST ACCIDENT INCIDENT NUMBER(S) (GSA Form 3090 for all injuries and/or deaths)				
	GSA	00		00						
	OTHER	14		05						
I	\$ LOSSES		GSA		OTHER FEDERAL		NON-FEDERAL			
	Building									
	Contents									
	Evacuation									
	Other									

SECTION II - FIRE (Complete for all fires)

J	AREA OF FIRE ORIGIN		EQUIPMENT INVOLVED IN IGNITION	
	Electrical Closet		Electrical explosion	
K	FORM OF HEAT OF IGNITION	TYPE OF MATERIAL IGNITED		FORM OF MATERIAL IGNITED
	Electrical	Furnishing, Wall Cover Ceiling		
L	METHOD OF EXTINGUISHMENT		LEVEL OF FIRE ORIGIN	
	Atlanta Fire Department			

SECTION III - STRUCTURE FIRE (Complete if structure fire)

M	EXTENT OF FLAME DAMAGE		EXTENT OF SMOKE DAMAGE	
	6th Floor South Tower		6th thru 10th Floor	
N	DETECTOR PERFORMANCE		SPRINKLER PERFORMANCE	
			N/A	
O	IF SMOKE SPREAD BEYOND ROOM OF ORIGIN	TYPE OF MATERIAL GENERATING MOST SMOKE		AVENUE OF SMOKE TRAVEL
		Wall covering/Ceiling tile		
P	FORM OF MATERIAL GENERATING MOST SMOKE			

SECTION IV - PROPERTY

Q	MOBILE PROPERTY	YR.	MAKE	MODEL	SERIAL NO.	LICENSE NO. (If any)
R	EQUIPMENT INVOLVED IN IGNITION	YR.	MAKE	MODEL	SERIAL NO.	VOLTAGE (If any)

SECTION V - PREPARER OF THIS REPORT

S	INVESTIGATOR'S SIGNATURE	DATE
	<i>Philip L. ...</i>	9/31/89

APPENDIX G
Toxicological Reports on Victims

<u>Name</u>	Age	<u>Carbon Monoxide in Blood (%)</u>	<u>Cause of Death</u>
Guy Ahlstedt*	28	Negligible	Asphyxia and Burns
Charles Chandler	29	65-70	Smoke Inhalation
Patsy Jones	37	35-40	Smoke Inhalation
Victor Tinubu	36	25-30	Smoke Inhalation
Eudora Rogers**	48	- - -	Smoke Inhalation

* Electrician

** Died three days after the fire

APPENDIX H

Photographs

1. Rescue by aerial at front of building.
2. Victims awaiting rescue on south side of building, sixth floor.
3. Firefighter ascending aerial to rescue victims on south side.
4. Victim reacts after being rescued, note truck company at front of building.
5. Resuscitation attempt on victim removed from rear of sixth floor.
6. Firefighter rests after making rescues over ladder. (Note apparatus placement in background.)
7. Front of building.
8. Rear of building showing differing construction of North and South Towers.
9. South side of building, showing driveway, looking toward front of building (Peachtree Street). Woman who jumped landed on this driveway.
10. Typical exit arrangement at rear of floor, South Tower.
11. Fifth floor corridor looking toward rear of building. Electrical closet is in foreground. Elevator lobby and front stairway are around the corner to right.
12. Elevator lobby on fifth floor, elevators are to left, exit is to the right. Smoke detectors were not installed on the sixth floor.
13. Front stairway, South Tower looking at door to sixth floor.







APPENDIX I

List of Slides/Photographs in Master Report File

Numerous slides and photographs are included in the master report file for this fire at the U. S. Fire Administration. The photographs appearing in Appendix H were produced from the items asterisked below.

(Provided by Nick Arroyo, Atlanta Constitution)

- * 1. Rescue by aerial at front of building (note smoke condition.)
- * 2. Victims awaiting rescue on south side of building, sixth floor.
 - 3. Close-up of victims on south side, sixth floor.
- * 4. Firefighter ascending aerial to rescue victims on south side.
- * 5. Victim reacts after being rescued, note truck company at front of building.
 - 6. Victims react after descending aerial.
- 7-11. Victims treated by medical and Fire Department personnel.
- * 12. Firefighter rests after making rescues over ladder. (Note apparatus placement in background.)
- * 13. Resuscitation attempt on victim removed from rear of sixth floor.

(Provided by Author)

- 2. Front of building
- * 3. Front of building.
- 4. Rear of building showing differing construction of North and South Towers.
- * 5. Rear of building showing different construction of North and South Towers.
- * 6-7. Typical exit arrangement at rear of floor, South Tower.
 - 8. Interior of occupant use hose cabinet, showing fire extinguisher and evacuation diagram.
- 12. Fifth floor corridor, looking toward front of building.
- * 14-15. Fifth floor corridor, looking toward rear of building. Electrical closet is in foreground. Elevator lobby and front stairway are around the corner to the right.
- 16. Mechanical and electrical closets.

- *17-19. Elevator lobby on fifth floor, elevators are to left, exit is to the right. Smoke detectors were not installed on the sixth floor.
- 20-22. Arrangement of exit at front of fifth floor.
- * 23. Front stairway, South Tower looking at door to sixth floor.
- * 24. South side of building, showing driveway, looking toward front of building (Peachtree Street). Woman who jumped landed on this driveway.
- 25. Courtyard at rear of building.

















